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DATA CENTER OPERATIONS BRANCH

NDS OPERATIONS PROCEDURE MANUAL
NO. P-L010

APPLICATIONS SOFTWARE
13 April 1983

LNSQR11

SYMBOLIC TITLE: LNSQ11

PROGRAMMER:

25X1

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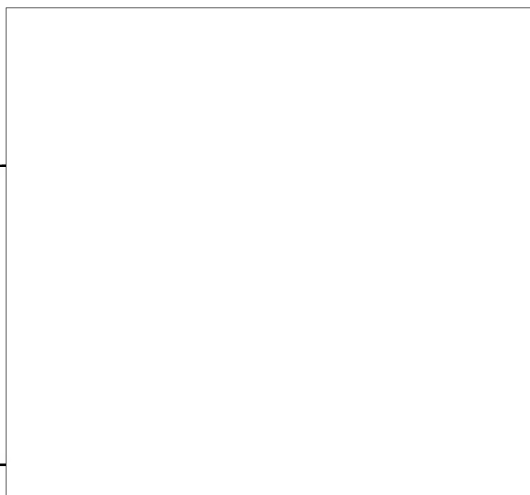
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Program LNSQ11

Date 16 July 1981

APPROVALS

This operations manual has been reviewed and approved by the following persons:



23 Dec 81
(date)

28 Dec 81
(date)

25X1

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Program LNSQ11

Date 16 July 81

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TOP SECRETProgram LNSQ11Date 16 July 81**SUMMARY**

The LINSQ11 program generates a listing for the Mission Analysis Branch (MAB), RSD/PSG for use with a mission file. LINSQ11 retrieves data from the MPF file to perform calculations on the frame and strip records within each mission for a given day.

In addition to calling two FORTRAN programs (SUB-LINSQ11/LNSQ11 and AZMUTH/LNSQ11) to compute linear mileage and square nautical mileage on both type of records, LNSQ11 computes the actual footage, the GMT, and the GSD, when necessary. Totals are given for each pass, as well as for the entire mission day.

LINSQ11 can be initialized by loading the provided card deck via a card reader. If the request form from MAB asks that the run be made for a specific date (rather than for the current date), MAB must keypunch a data card (to replace the standard data card of '999999') with the date specified by MAB using the format given on page 7a. When the run is completed, the original data card (with '999999') is to be replaced in the card deck, removing the data card prepared by TSS. The card deck is to be maintained by DCOB.

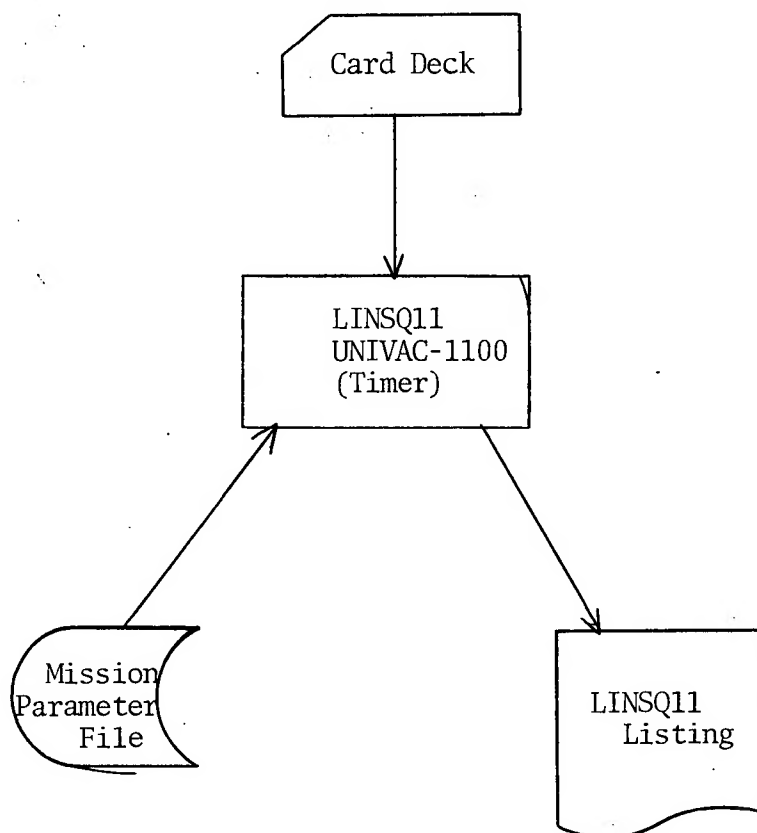
Copies of the LNSQ11 Listing should be forwarded to C/MAB/RSD/PSG.

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OPERATIONAL FLOW CHART



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Program LNSQ11

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COMPUTER RUN PREPARATION

PUNCHED CARD INPUT

Type: Control Card

Identification: @RUN

Format: @RUN,C/R LNSQ11,S33741016/BOLTON,XM1,0240

N = numeral

A = letter

X = any legitimate character
in card code

S = special character

Z = optional character

ξ = plus

- = minus

<u>Field</u>	<u>Column</u>	<u>Comments</u>
1	1-8	SAAASASA
2	10-16	AAAAAAS
3	17-26	ANNNNNNNNS
4	27-33	AAAAAAS
5	34-37	ANNS
6	38-41	NNNN

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TOP SECRETProgram LNSQ11Date 16 July 81**COMPUTER RUN PREPARATION****PUNCHED CARD INPUT**

Type: Control Card

Identification: @ASG

Format: @ASG,A NDS*PRODSHEMA.

N = numeral
A = letter
X = any legitimate character
in card code

Z = optional character (letter of
numeral)
& = plus
- = minus
S = special character

<u>Field</u>	<u>Column</u>	<u>Comments</u>
1	1-6	SAAASA
2	9-23	AAASAAAAAAAAAAS

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COMPUTER RUN PREPARATION

PUNCHED CARD INPUT

Type: Control Card

Identification: @SYM

Format: @SYM PRINT\$. ,1,PR

N = numeral
A = letter
X = any legitimate character
in card code

Z = optional character (letter of
numeral)
& = plus
- = minus
S = special character

<u>Field</u>	<u>Column</u>	<u>Comments</u>
1	1-4	SAAA
2	6-13	AAAASSS
3	14-15	NS
4	16-17	AA

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COMPUTER RUN PREPARATION

PUNCHED CARD INPUT

Type: Control Card

Identification: @ASG

Format: @ASG,A XMI*P\$ABS.

N = numeral

A = letter

X = any legitimate character
in card code

Z = optional character (letter of
numeral)

& = plus

- = minus

S = special character

Field

Column

Comments

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COMPUTER RUN PREPARATION

PUNCHED CARD INPUT

Type: Control Card

Identification: @ERS

Format: @ERS TPF\$

N = numeral

A = letter

X = any legitimate character
in card codeZ = optional character (letter of
numeral)

& = plus

- = minus

S = special character

FieldColumnComments~~TOP SECRET~~

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COMPUTER RUN PREPARATION

PUNCHED CARD INPUT

Type: Control Card

Identification: @COPY,A

Format: @COPY,A XM1*P\$ABS.LNSQ11,TPF\$

N = numeral

A = letter

X = any legitimate character
in card codeZ = optional character (letter of
numeral)

+ = plus

- = minus

S = special character

FieldColumnComments

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COMPUTER RUN PREPARATION

PUNCHED CARD INPUT

Type: Control Card

Identification: @FREE

Format: @FREE XMI*P\$ABS.

N = numeral
A = letter
X = any legitimate character
in card code

Z = optional character (letter of
numeral)
& = plus
- = minus
S = special character

<u>Field</u>	<u>Column</u>	<u>Comments</u>
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COMPUTER RUN PREPARATION

PUNCHED CARD INPUT

Type: Control Card

Identification: @XQT

Format: @XQT TPF\$.LNSQ11

N = numeral
A = letter
X = any legitimate character
in card code

Z = optional character (letter of
numeral)
& = plus
- = minus
S = special character

Field

Column

Comments

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COMPUTER RUN PREPARATION

PUNCHED CARD INPUT

Type: Data Card

Identification:

Format: 999999

N = numeral
A = letter
X = any legitimate character
in card code

Z = optional character (letter of
numeral)
& = plus
- = minus
S = special character

<u>Field</u>	<u>Column</u>	<u>Comments</u>
1	1-6	NNNNNN

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COMPUTER RUN PREPARATION

PUNCHED CARD INPUT

Type: Control Card

Identification: @FIN

Format: @FIN

N = numeral
A = letter
X = any legitimate character
in card code

Z = optional character (letter of
numeral)
& = plus
- = minus
S = special character

<u>Field</u>	<u>Column</u>	<u>Comments</u>
1	1-4	SAAA

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Program LNSQ11

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PUNCHED CARD INPUT (Continued)

Source: Card deck maintained by DCOB-

Sequence:

Restrictions:

Peripheral Device: Card Reader and Printer

Quantity:

Disposition: Card deck maintained in DCOB

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Program LNSQ11

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HIGH-SPEED PRINTER OUTPUT

Identification: LNSQ11

Format: (See sample on page 11)

Type of Form:

Disposition: Forward to C/MAB/RSD/PSG

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COMPUTER RUN PREPARATION SUMMARY

Assembly System: SPURT FD _____ SPRYE _____ ALGOL _____ FORTRAM IV _____ COBOL X _____ SIMSCRIPT _____
Hardware System: Univac 1100 (Timer) Run Sequence _____ of _____
Application: _____ Program Name LNSQ11 Programmer Core: Min _____ Ma 25X1
Drum: _____ Estimated Run Time: _____

MAGNETIC TAPE (File Protect All Output Tapes)

Logical Servo No. _____
or Symbolic Name _____
Work _____
Input/Output _____
Standard Tape _____
Label (See OPB/TAS) _____

Disposition: Reten- _____
Save, List, & tion _____
Release Period _____
Next Phase _____
[Prog. Name(s)] _____

INPUT

_____ Data Cards - Prog. Controlled (Volume) _____
_____ Parameters - Prog. Controlled (Volume) _____
_____ Parameters - Oper. Load as Errata (Volume) _____
_____ Paper Tape (Volume) _____

1004 Board Name (no.) _____ Carriage Tape OUTPUT On XX Off _____ Line _____
Off Line Estimated Run Time: _____ (Hours & Tenths)

Printer (Type Paper/No. of Copies) 143/1 copy

Cards on _____ Off _____ Line: _____ Plotter On _____ Off _____ Line: _____
(Volume) (Amount of paper in feet)

Other On _____ Off _____ Line: _____
(Volume)

Program LNSQ11

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ON-LINE COMPUTER PROCESSING

EQUIPMENT REQUIREMENTS

Computer: Univac 1100 (Timer)

Schema Used:

Storage:

Core Required -

I Bank -

D Bank -

Peripheral Devices: Card Reader; Printer

Restrictions:

Files Accessed:

Files Created/Deleted:

File Size:

Approximate Number of Accesses:

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Program LNSQ11

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NORMAL RUN INSTRUCTIONS

Initiation: Load card deck in reader and run job. Use 999999 for date unless otherwise specified.

Monitor:

Message

Cause

Operator Action

None

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Program LNSQ11

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NORMAL RUN INSTRUCTIONS (Continued)

```
1: @RUN    LNSQ11, S33741016/BOLTON, XM1
2: @ASG, A NDS*PRODSHEMA.
3: @SYM PRINT$, 1, PR
4: @ASG, A XM1*P$ABS.
5: @ERS TPF$.
6: @COPY, A XM1*P$ABS. LNSQ11, TPF$.
7: @FREE XM1*P$ABS.
8: @XQT TPF$. LNSQ11
9: 811208
10: @FIN
```

Interrupt/Reentry: None

Termination: Standard

Take-down: Replace card deck in DCOB storage for future use.

II Keyins:

Disposition of Data: Forward output to C/MAB/RSD/PSG.

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ABNORMAL RUN INSTRUCTIONS

Messages:

<u>Message</u>	<u>Cause</u>	<u>Operator Action</u>
EN-ERROR, ERROR STATUS IS ERROR-STATUS	DMS Problem	Try again, if same error occurs, call CSD.
ERROR ON ROLLBACK As well as message above	DMS Problem	Same as above.

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XMI*P\$SYM.AZMUTH/LNSQ11

Three different versions of AZMUTH, a LNSQ11 subroutine, are on the 1100/40 Operational System:

- 1) XES*S-YOPTION.AZMUTH/AZM
- 2) LIB*SYM.AZMUTH/AZM
- 3) C494*SYM.AZMUTH/AZM

It is not known which version of AZMUTH was used to create the absolute for LNSQ11 on the 1100/40; therefore, all three versions were tested on the 1100/80 system. Of the three, LIB*SYM.AZMUTH/AZM was the only one that worked on the 1100/80 and is the version that was used to create the absolute for the 1100/80 converted version of LNSQ11.

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OPERATIONS BRANCH WORK REQUEST										
TO: PRODUCTION ANALYSIS SECTION/OB/AID/PDG										
PAS NO. (Leave blank)	COMPONENT CODE S42		PROJECT NO. 730000		TYPE RUN <input type="checkbox"/> PRODUCTION <input type="checkbox"/> CHECKOUT <input type="checkbox"/> ASSEMBLE <input type="checkbox"/> COMPILE <input type="checkbox"/> OPEN SHOP <input type="checkbox"/> ATTENDED <input type="checkbox"/> KEYPUNCH <input type="checkbox"/> OTHER _____		PAS	IN		
REQUESTER	PHONE NO.		QUANTITY					OUT		
PRODUCT										
SECURITY CLASSIFICATION										
CONTROL NUMBER										
TYPE FORM		D & BS		INPUT		OUTPUT		PROGRAM LOAD		
<input type="checkbox"/> 1471 <input type="checkbox"/> 1468 <input type="checkbox"/> 116 OTHER _____		BIND Y N BURST Y N TRIM R L		<input type="checkbox"/> TAPE(S) <input type="checkbox"/> CARDS <input type="checkbox"/> NONE OTHER _____		<input type="checkbox"/> TAPE(S) <input type="checkbox"/> CARDS <input type="checkbox"/> PRINTER OTHER _____		<input type="checkbox"/> TELETYPE <input type="checkbox"/> CONSOLE <input type="checkbox"/> CARDS		
DATA CONTROLLER		QUALITY CONTROL IN		QUALITY CONTROL OUT		COMPUTER RM.SUPERVISOR		CUST PICKUP	BADGE NO.	OUT
DATE		DATE		DATE		DATE				
BADGE NO.		BADGE NO.		BADGE NO.		BADGE NO.				
JOB DESCRIPTION										
<p style="text-align: center;"><u>OP</u></p> <p>Please run LNSQ11 with the following date card:</p> <p style="text-align: center;">YYMMDD 810105</p>										

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PRYOR 5081

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Approved For Release 2008/03/12 : CIA-RDP94T00858R000601600001-6

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70
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